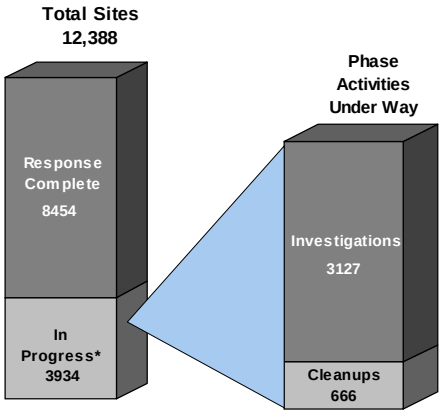
ARMY

CLEANUP STATUS AND PROGRESS

"CONGRESS IS CHALLENGING US TO DO MORE WITH LESS. THE ARMY'S ENVIRONMENTAL SUCCESS STORIES INCLUDE INNOVATIVE WAYS TO DO MORE WITH FEWER RESOURCES. OUR USE OF INNOVATIVE TECHNOLOGIES AND OUR PARTNERSHIPS WITH FEDERAL, STATE, AND LOCAL OFFICIALS ARE YIELDING VERY POSITIVE RESULTS."
—RAYMOND J. FATZ, DEPUTY ASSISTANT SECRETARY OF THE ARMY

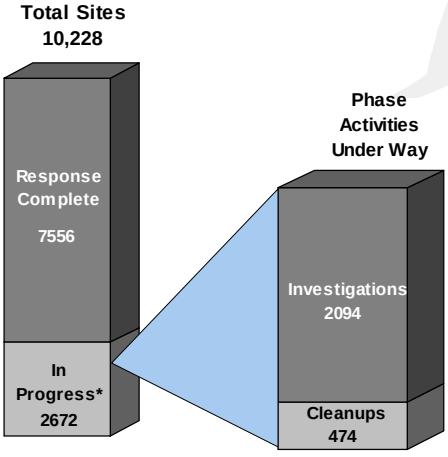
ER, Army and BRAC Status as of September 30, 1997



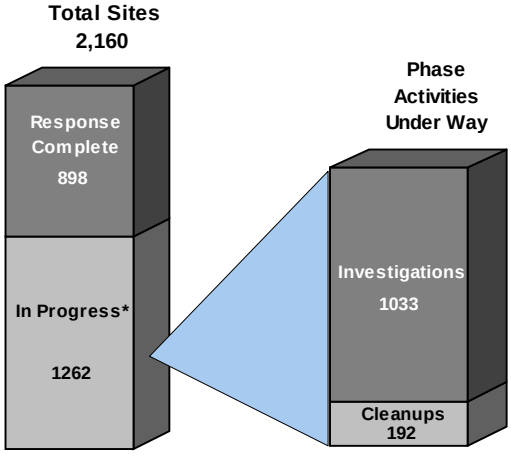
The devolvement of the central Defense Environmental Restoration Account (DERA) to individual service accounts and the Army's initiative decentralizing execution of its cleanup program made fiscal year 1997 (FY97) a challenging year for the Army's Installation Restoration and Base Realignment and Closure (BRAC) remediation programs. Army program managers and technical managers met these challenges, exceeding expectations for executing the program.

To date, the Army has identified 12,388 potentially contaminated sites at 1,187 installations. Of these sites, 8,454 require no further action, except for long-term monitoring. Restoration activities are planned or under way at 3,934 sites. The Army has completed final remedy construction at 919 sites, 84 of which require Remedial Action Operations. In addition, the Army has completed 1,853 interim cleanups at 1,379 sites.

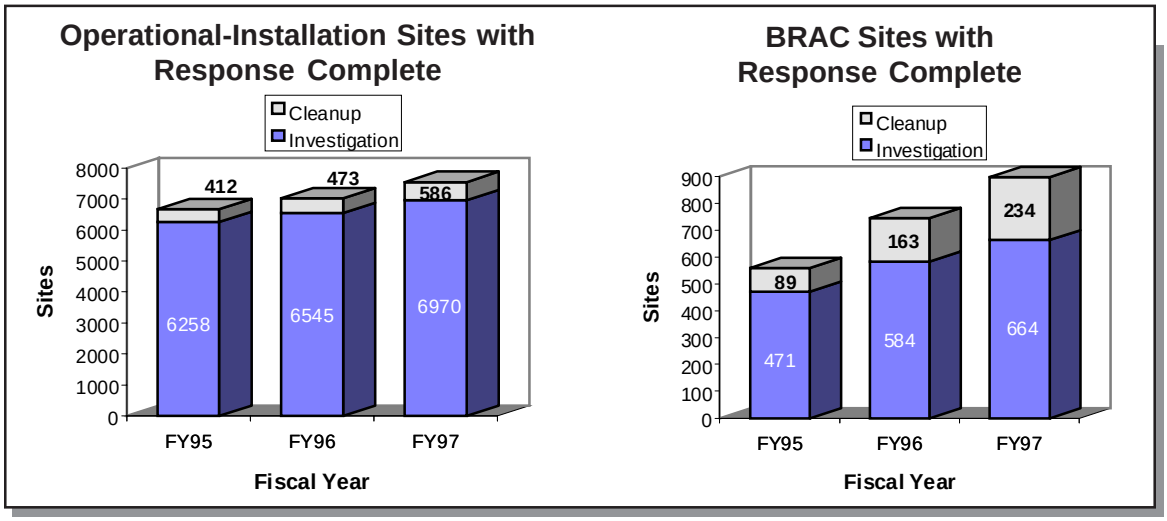
ER, Army Site Status as of September 30, 1997

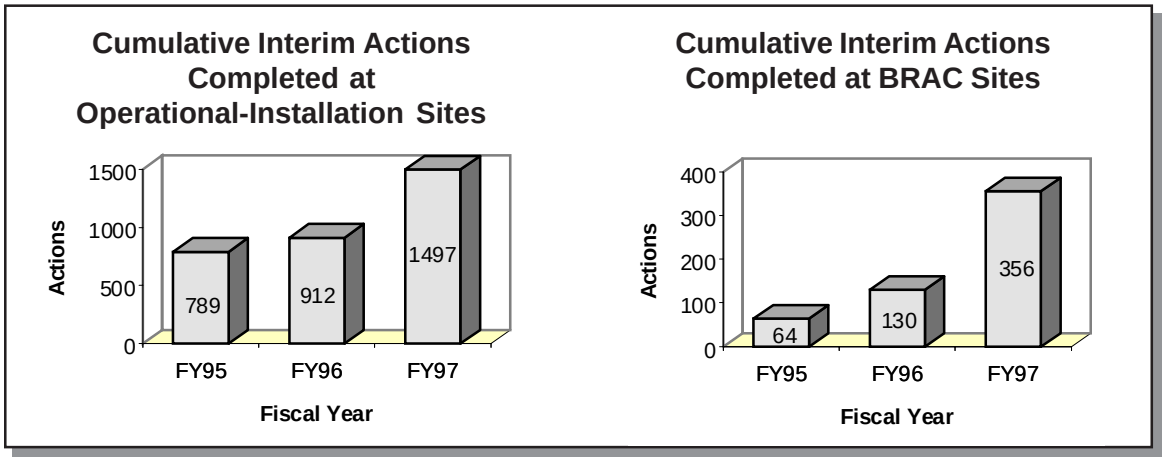


BRAC Site Status as of September 30, 1997



* NOTE: IN-PROGRESS INCLUDES SITES THAT WILL BE UNDER WAY IN THE FUTURE. THEREFORE, TOTALS OF SITES WITH PHASE ACTIVITIES UNDER WAY ARE GENERALLY LESS THAN THE TOTAL NUMBER OF SITES IN PROGRESS.

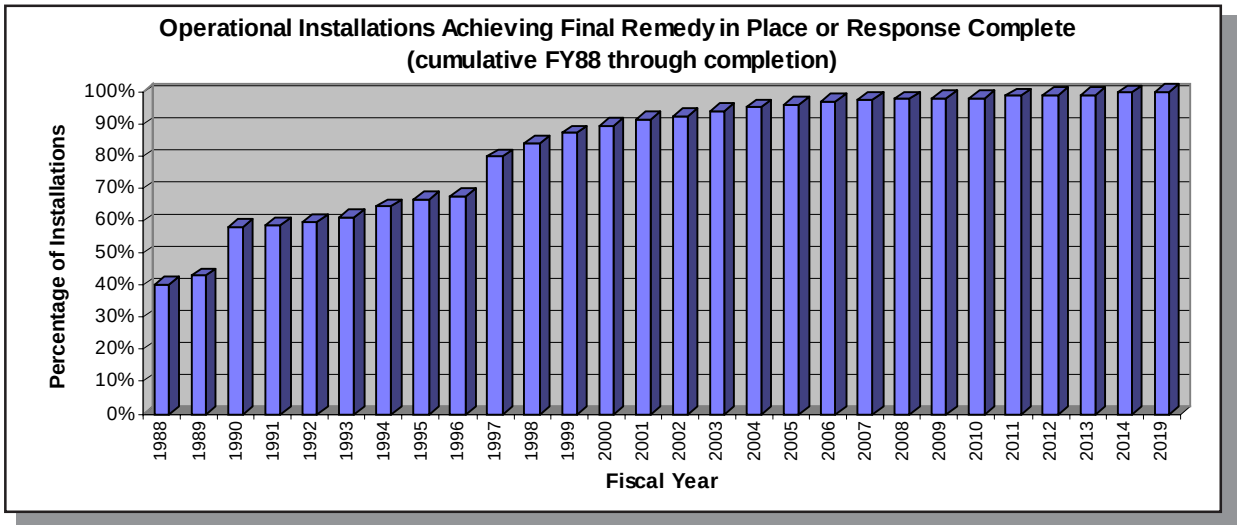


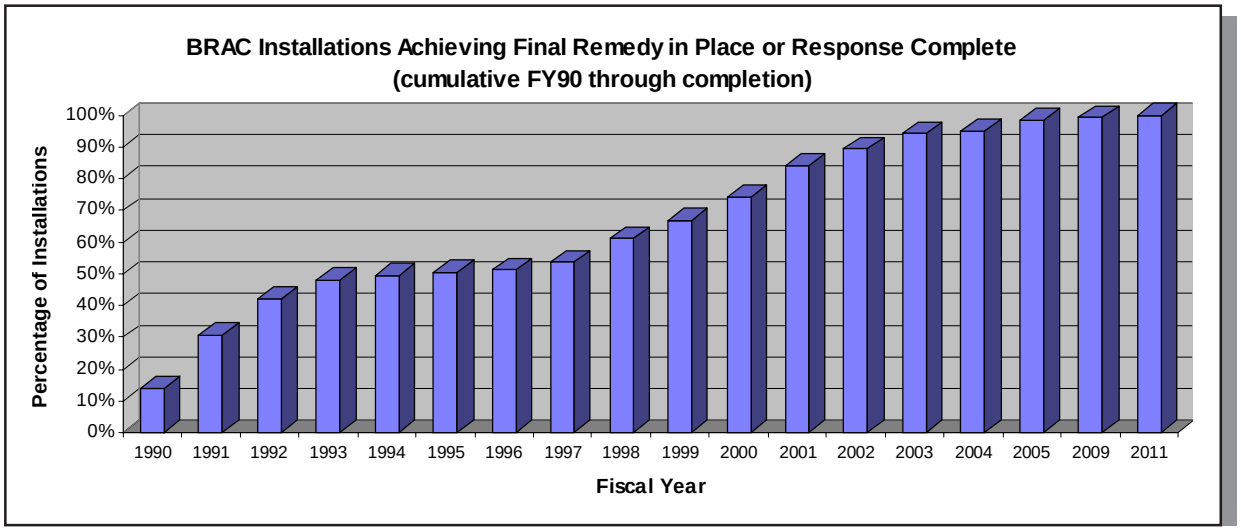


Restoration activities are in progress at most of the 112 installations that are being closed and most of the 27 installations being realigned under the BRAC 1988, 1991, 1993, and 1995 rounds. Thirty-nine BRAC cleanup teams have been formed to support fast-track cleanup at installations where there is excess property. At all other locations, the Army has appointed a point of contact for fast-track cleanup. In FY98, the Army will complete all Environmental Baseline Surveys for installations affected by the 1995 BRAC round.

GOALS AND PRIORITIES

The Defense Planning Guidance requires that the Services have Remedies in Place at 50 percent of all high-relative-risk sites by the end of FY02, and that they have Remedies in Place at all high relative-risk sites by FY07. If program requirements remain stable and program guidance is supported, the Army will meet these goals. The Army continues to refine its estimates for completing cleanup of its hazardous waste sites. Careful examination of cleanup assumptions, application of innovative technologies, and validation of data from outstanding cleanup sites have yielded a total





cost-to-complete estimate of $9.1 billion: $7.6 billion for Installation Restoration at active bases and $1.5 billion for BRAC installations. This total is $1.2 billion less than the cost-to-complete last year.

A major effort for the Army in FY97 was the development of a Proposed Range Rule. The Office of the Secretary of Defense directed the Army to develop such a rule, covering remediation of unexploded ordnance and constituent contaminants at ranges that have been closed or transferred or are undergoing transfer. This rule and decisions on its implementation could have a significant effect on the Army's restoration program. The rule must ensure that the Department of Defense (DoD) is responsive and responsible and must include methods for conducting range responses within DoD authority. The rule will specify procedures that protect human health and safety and the environment and should result in cost-effective responses. The proposed rule was published in the *Federal Register* on September 26, 1997, with comments due by December 29, 1997. DoD will develop proposed responses to comments received. One milestone in FY98 will be the publication

of the interim Range Rule risk assessment methodology, which is necessary for applying the Range Rule consistently at all DoD closed, transferring, and transferred ranges.

In its BRAC environmental restoration program, the Army is focusing on making property environmentally suitable for transfer. In addition to addressing imminent threats to human health and the environment, the BRAC program emphasizes property reuse potential when establishing cleanup priorities. The Army's last Remedy in Place (RIP) action for a BRAC installation is projected to occur by 2011; its last Response Complete (RC) action for a BRAC installation is projected to occur by 2032.

Program Accomplishments

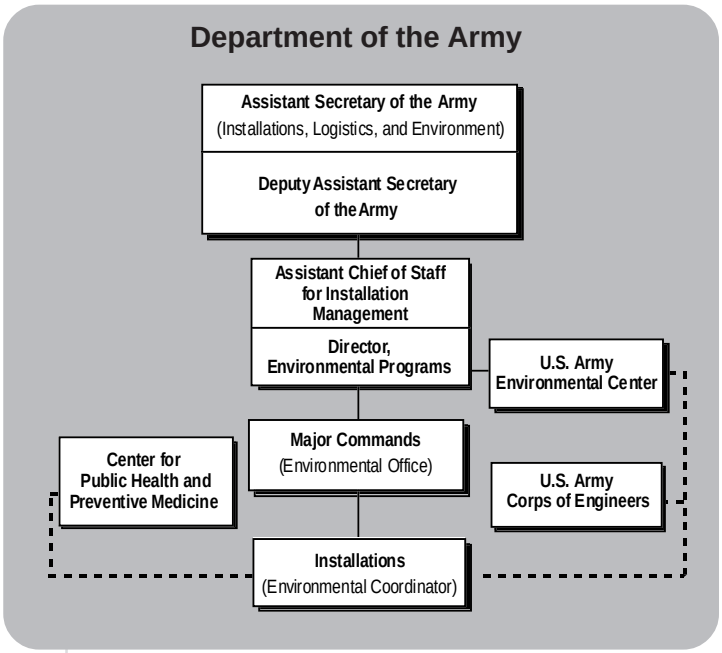
Several installations achieved significant cost savings in their FY97 restoration efforts. Fort Bliss, Texas, saved $5.4 million by using alternative, less stringent cleanup levels based on future land use. Twin Cities Army Ammunition Plant in Minnesota saved $5 million by adopting a proposed U.S. Environmental Protection Agency (EPA) revision concerning cleanup levels for dioxin-contaminated soil. At the former Fort Ord in California, the Army and regulators agreed on a remedy that uses on-site disposal of contaminated soil. Use of this remedy resulted in a large cost savings over traditional off-site disposal. Fort Ord also was able to implement its groundwater treatment systems within 14 months of signing the Record of Decision for the systems.

Other installations were equally successful in expediting site remediation. Fast-track cleanup of the Army Research Laboratory in Woodbridge, Virginia, led to completion of the Remedial Investigation and Feasibility Study and the Record of Decision for the installation within 30 months. Lake City Army Ammunition Plant saved money and time by using an innovative application of multiphase soil vapor extraction for remediation of soil contaminated with hydrocarbons. In this remedy, water is pumped to lower the groundwater level, thus permitting deeper in situ soil treatment. Obtaining EPA's approval for this innovative remedy allowed the installation to avoid costly and time-consuming excavation of contaminated soil.

At BRAC installations, future uses of installation property are of primary concern. At the former Fort Ord, lead is being removed from beach ranges, which will then become part of a recreation area along Monterey Bay. At the former Fort Sheridan in Illinois, the Army and regulators determined that no further action was needed at two landfills, clearing the way for transfer of a large land parcel in the Historic District. Two other landfills at Fort Sheridan require cleanup. Data on these two landfills support construction of a cap instead of excavation and disposal of contaminated material. But, because some residents favor excavation and disposal as the means of remediation, the Army has agreed to continue collecting and reviewing data after the cap's installation, to ensure that the remedy adequately protects human health and the environment.

Management Initiatives and Improvements

The Army successfully tested a pilot peer review program at four BRAC installations. The program involved a 1- to 2-week review of the technical, administrative, and managerial aspects



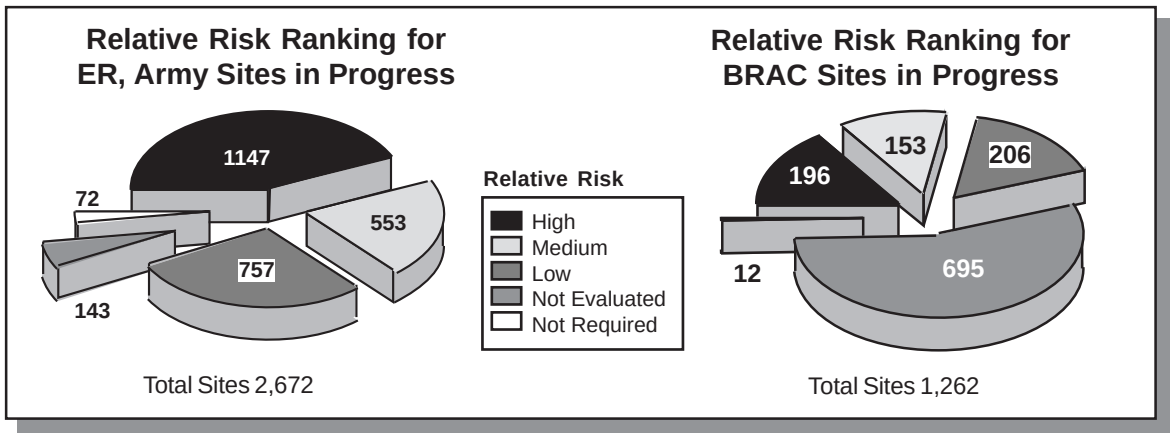
of an installation's cleanup program by a panel of Army and non-Army experts. Advice emerging from the review ranged from specific remedies for cleanup sites to ideas on how to deal with regulators and the public on controversial issues. If the four participating installations successfully implement the reviewers' recommendations, the Army will avoid approximately $10 million in cost. The success of these pilot tests and the Air Force's success with a similar program led the Army to plan peer reviews at 10 to 15 BRAC installations and 2 active installations for FY98.

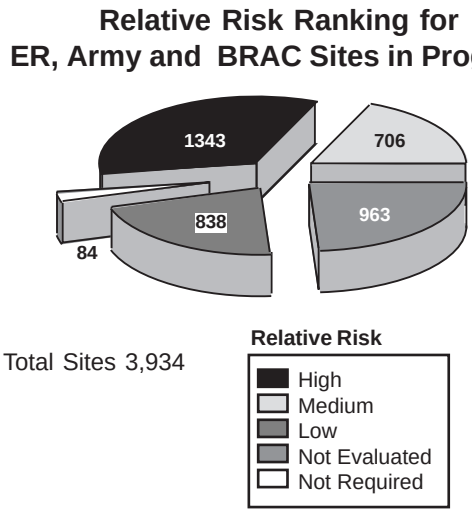
At the Rocky Mountain Arsenal in Colorado, a Remediation Venture Office, consisting of representatives of the Army, the U.S. Fish and Wildlife Service, and Shell Oil Company, developed a program management contract for the arsenal's remediation activities. The contract will provide central program management of the installation's 31 remediation projects and will help the Army meet public expectations for the cleanup of the Army's largest and most complex National Priorities List site. Contract planning and development occurred in FY97, and the contract was awarded in December 1997.

In addition, in FY97 the Army made the transition from centralized management and execution of the restoration program by the Army Environmental Center to decentralized management and execution by the Major Army Commands (MACOM). This initiative resulted primarily from the Army's wish to give those responsible for environmental restoration at the installations the authority and the resources to execute the program. The need to reduce headquarters staffing was another motivating factor. According to indicators such as obligation rates, execution of planned activities, and a reduction in the number of high-relative-risk sites requiring remediation, the MACOMs have exceeded expectations for their first year. In addition, the MACOMs and installations have developed closer relationships with the regulators because they can speak with authority about planned actions.

Relative Risk Implementation

The Army has pledged to substantially reduce the number of sites that have not been evaluated for relative risk. These evaluations are essential to cleanup efforts at active installations because they are used to sequence cleanup efforts. Although at BRAC installations the Relative Risk Site Evaluation is less important than the potential for reuse of the property, such evaluations still help the Army determine the sequence of cleanup efforts at BRAC installations. The Army is reducing the number of unevaluated sites. At active installations, the number has decreased from 937 to 143. The BRAC program has 695 unevaluated sites. By the end of FY98 the Army should complete all BRAC evaluations.





Information and Technology Transfer

In FY97, the Army began efforts to merge its financial information into the Defense Site Environmental Restoration Tracking System (DSERTS). Consolidating this information in a central database that can be linked to other environmental databases is expected to improve program reporting. These efforts are scheduled for completion in FY98. The Army already has fielded improved software tools, which have improved data quality for this report.

The Army continues to use the Internet to improve communication, sharing of lessons learned, and access to guidance. DoD's and the Army's key guidance documents have been posted on the Army's Defense Environmental Network and Information Exchange (DENIX). DENIX, in turn, is linked to all appropriate DoD and other federal sites. The Army's BRAC Office and the Army Environmental Center now have web sites of their own to enhance communication.

The Army Environmental Center can be found on the World Wide Web at ***http://aec www.apgea.army.mil:8080/***

The Army BRAC Web Site is ***http://www.hqda.army.mil/acsimweb/brac/braco.htm***

Outreach

In August 1997, the Army held a Defense Environmental Restoration Program Workshop in Denver, Colorado. There were more than 300 participants, representing staff from all levels of the Army, as well as state and federal regulatory agencies. The workshop covered such topics as program goals, budgeting, community involvement, partnering, innovative technologies, case studies, and regulatory issues.

The Army will conduct another workshop in FY99.

During the FY97 workshop, EPA's Chief of the Federal Facility Restoration and Reuse Office challenged the Army to overcome a perception within his agency that the Army was less cooperative and proactive than the other services in dealing with regulators. This challenge prompted the Army to initiate partnering sessions between key Army decision makers from Army Headquarters and MACOMs and their counterparts in the EPA regions. This initiative will begin in FY98. It should establish a framework for future cooperation between the Army and EPA and will improve EPA's understanding of the Army's program.

The U.S. Army Forces Command (FORSCOM) already has taken the initiative to involve the appropriate regulators in planning restoration activities at its installations. FORSCOM scheduled 2-day meetings with regulators to complete the Installation Action Plan at each installation. Regulators are given the opportunity to participate in deciding which cleanup sites should have the highest funding priority and to suggest technical solutions that might stretch available resources to additional sites. This initiative has done more than any other initiative in recent memory to improve relations between regulators and decision makers in the Army's cleanup program.

Other partnerships with stakeholders have occurred at various levels. Formal partnering agreements with regulators, as well as informal efforts, were established. At the Army Research Laboratory–Watertown, Massachusetts, partnering with EPA, the state, and the installation's restoration advisory board (RAB) cut 1 year from the restoration schedule. This will allow expedited property transfer.

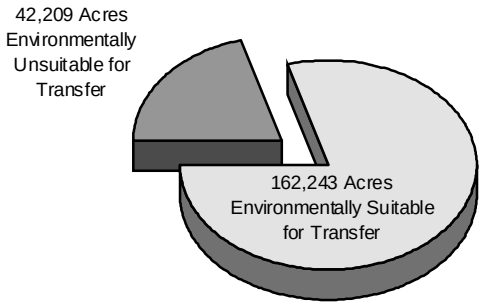
The U.S. Army Corps of Engineers (USACE) accelerated site investigation and improved community relations at Fort Greely, Alaska, by holding an environmental partnering workshop. The workshop was designed to improve coordination and understanding among the various entities with a vested interest in the successful realignment of the Fort. Participants included the Local Reuse Authority; members of the RAB; EPA; the Alaska Department of Environmental Conservation; U.S. Army Alaska; USACE Alaska District; and the USACE Total Environmental Restoration Contractor, Jacobs Engineering. During the workshop, USACE and other workshop participants developed an accelerated schedule to allow investigation of all prioritized sites at the installation. The 9-week schedule reduction achieved by this effort was particularly significant because of the short season available for studies and construction in Alaska. In addition to shortening the schedule, the USACE-sponsored workshop led to an understanding between the parties, an important accomplishment given the sensitivity of the issues.

The Army established 10 RABs in FY97, 7 at active installations and 3 at BRAC installations. The Army now has 59 RABs.

BRAC Highlights

The BRAC program is using several property transfer mechanisms, including Economic Development Conveyances, which are scheduled and tracked closely. The investigation and cleanup for the property in question are expected to be conducted so that those conveyances can proceed. Installations at which such conveyances are expected include Detroit Arsenal, Letterkenny Army Depot, Jefferson Proving Ground, and Fort Benjamin Harrison. The Army also is preparing for the first time to use CERCLA §120(h)(3)(c) early transfer authority. The Army's first early transfer (which will occur at the Tooele Army Depot) is expected to take place in FY98. The BRAC program continues to stress expediting environmental responses to meet property transfer goals and is using removal

Environmental Condition of BRAC Property



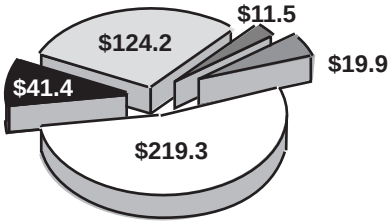
authority to a greater extent in order to achieve these goals. Decision makers within the BRAC program also are aware that they may not be able to meet environmental requirements with planned funding. Therefore, they are emphasizing efficiencies and cost avoidances. The peer review program, which will be implemented fully in FY98, is designed to help identify such cost avoidances.

DEVOLVEMENT

As reported for FY96, the devolvement of the DERA has had the desired effect. Now that the Army has fiscal responsibility for all aspects of its cleanup program, its leadership — from installations to major commands to department headquarters — has taken a greater role in programming, budgeting, and executing cleanup requirements at active Army installations. This increased leadership involvement has resulted in a better justified FY98 program; better long-term programming, as reflected in the current Program Objective Memorandums; and a greater accountability for FY97 program execution. In essence, the Army now has, and accepts, ownership of its Installation Restoration Program.

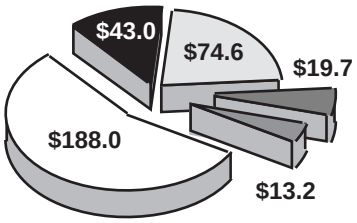
Army Environmental Restoration Funding Profile (in millions of dollars)

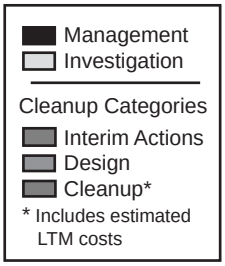
FY96 DERA Funds Executed



Total = $416.3 million

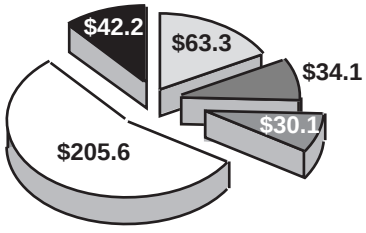
FY97 ER, Army Funds Obligated





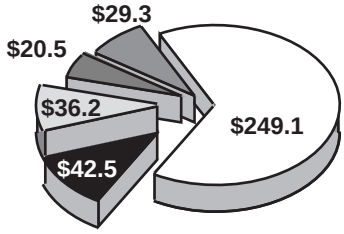
Total = $338.5 million

FY98 ER, Army Execution Planned



Total = $375.3 million

FY99 ER, Army Planning Estimates



Total = $377.6 million